



OIPE

Page 1 of 8

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/092,243A

DATE: 06/03/2002 TIME: 13:55:12

- 3 <110> APPLICANT: Hillman, Jeffrey D.
- 5 <120> TITLE OF INVENTION: Microbial Polynucleotides Expressed During Infection of
- 6 a Host
- 8 <130> FILE REFERENCE: MBHB00-505I
- 10 <140> CURRENT APPLICATION NUMBER: 10/092,243A
- C--> 11 <141> CURRENT FILING DATE: 2002-05-21
 - 13 <150> PRIOR APPLICATION NUMBER: 60/147,551
 - 14 <151> PRIOR FILING DATE: 1999-08-06
 - 16 <150> PRIOR APPLICATION NUMBER: US00/21340
 - 17 <151> PRIOR FILING DATE: 2000-08-04
 - 19 <160> NUMBER OF SEQ ID NOS: 20
 - 21 <170> SOFTWARE: PatentIn Ver. 2.1
 - 23 <210> SEQ ID NO: 1
 - 24 <211> LENGTH: 849
 - 25 <212> TYPE: DNA
 - 26 <213> ORGANISM: Actinobacillus actinomycetemcomitans
 - 28 <220> FEATURE:
 - 29 <221> NAME/KEY: misc_feature
 - 30 <222> LOCATION: (566)
 - 31 <223> OTHER INFORMATION: N stands for any nucleotide.
 - 33 <220> FEATURE:
 - 34 <221> NAME/KEY: misc_feature
 - 35 <222> LOCATION: (625)
 - 36 <223> OTHER INFORMATION: N stands for any nucleotide.
 - 38 <220> FEATURE:
 - 39 <221> NAME/KEY: misc_feature
 - 40 <222> LOCATION: (627)
 - 41 <223> OTHER INFORMATION: N stands for any nucleotide.
 - 43 <220> FEATURE:
 - 44 <221> NAME/KEY: misc_feature
 - 45 <222> LOCATION: (636)
 - 46 <223> OTHER INFORMATION: N stands for any nucleotide.
 - 48 <220> FEATURE:
 - 49 <221> NAME/KEY: misc_feature
 - 50 <222> LOCATION: (650)
 - 51 <223> OTHER INFORMATION: N stands for any nucleotide.
 - 53 <220> FEATURE:
 - 54 <221> NAME/KEY: misc_feature
 - 55 <222> LOCATION: (656)
 - 56 <223> OTHER INFORMATION: N stands for any nucleotide.
 - 58 <220> FEATURE:
 - 59 <221> NAME/KEY: misc_feature
 - 60 <222> LOCATION: (661)



RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/092,243A

DATE: 06/03/2002 TIME: 13:55:12

- 61 <223> OTHER INFORMATION: N stands for any nucleotide.
- 63 <220> FEATURE:
- 64 <221> NAME/KEY: misc_feature
- 65 <222> LOCATION: (672)
- 66 <223> OTHER INFORMATION: N stands for any nucleotide.
- 68 <220> FEATURE:
- 69 <221> NAME/KEY: misc_feature
- 70 <222> LOCATION: (681)
- 71 <223> OTHER INFORMATION: N stands for any nucleotide.
- 73 <220> FEATURE:
- 74 <221> NAME/KEY: misc_feature
- 75 <222> LOCATION: (720)
- 76 <223> OTHER INFORMATION: N stands for any nucleotide.
- 78 <220> FEATURE:
- 79 <221> NAME/KEY: misc_feature
- 80 <222> LOCATION: (723)
- 81 <223> OTHER INFORMATION: N stands for any nucleotide.
- 83 <400> SEQUENCE: 1
- 84 gatcgcgtaa acggtgtaac acggaaagca attgtttaat gtcggcaaaa tgcagccctg 60
- 85 tggtcggttc gtccagaata tacagggttt tgcccgtatc ccgtttggag agttccgtcg 120
- 86 ccagtttcac ccgttgcgct tccccgccgg acagggtggt agaggattgc cccaagcgaa 180
- 87 tataagacaa geecaegtea ateagggttt geaatttaeg egeaateatt ggaatggeat 240
- 88 cgaaaaactc gcgcgcatct tccaccgtca tgtccagcac ctgatgaatg gttttacctt 300
- 89 tgtagcggat ttccagggtt tcgcgattgt aacgcttgcc tttacattgg tcgcaaggca 360
- 90 cqtacacatc gggcaggaag tgcatttcca ctttgattac gccgtcgccc tggcaggctt 420
- 91 acagegeeeg eegegeaegt taaaaetgaa aegeeeeggg ttataacege gegeaeggge 480
- 92 tttcggtacg ccggcaaaca attcgcgaat cggcgtgaat acgcccgtgt aagttgcccg 540
- W--> 93 gttggagcgt ggcgtgcgtc caatcnggct ttggttaata tcaatacttt atcgaaaaat 600
- W--> 94 tccaaacctt taatggactt gtacngngaa acctcngcat tttctgcacn attaangcgt 660 W--> 95 nttgtgcaat anggaacaaa ntgtcgttaa tcagtgtaga atttacctta accggacacn 720
- W--> 96 ccngtgatgc aggtaaataa gcccacggga atgtctaaat tgacgttttt caggttgtta 780
 - 97 ccggaagcgc cgaacaattt gagcattttt ttcttatcaa gtgcggtacg ttttttcggt 840
 - 98 atttcgatc

- 101 <210> SEO ID NO: 2
- 102 <211> LENGTH: 357
- 103 <212> TYPE: DNA
- 104 <213> ORGANISM: Actinobacillus actinomycetemcomitans
- 106 <400> SEOUENCE: 2
- 107 gatcactaag ttgttcaatc ctttcgcttg ggaatctttg tctaaatacg gtttatgttg 60
- 108 cattgcgtta acgtctaaat cacctttaga cactgcagtg tttggcaagg cgtagtcatg 120
- 109 aataaaacgt attctacgtc taagttgtat ttttcttttg ccactttcgc tgcgatttca 180
- 110 gccacttggt gttccggtcc tgccatcacg cccactttga ttgttgccgg ggcttctgcc 240
- 111 gccggtttgt ctgccggtgc ggcttccggt tttttctctt cattacaagc ccgttaaggc 300
- 112 gaatacggag gctaatgttg cgacgcctaa taatttttt caagttcata aaagatc
- 115 <210> SEQ ID NO: 3
- 116 <211> LENGTH: 886
- 117 <212> TYPE: DNA
- 118 <213> ORGANISM: Actinobacillus actinomycetemcomitans
- 120 <220> FEATURE:



RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/092,243A

DATE: 06/03/2002 TIME: 13:55:12

- 121 <221> NAME/KEY: misc_feature
- 122 <222> LOCATION: (554)
- 123 <223> OTHER INFORMATION: N stands for any nucleotide.
- 125 <220> FEATURE:
- 126 <221> NAME/KEY: misc_feature
- 127 <222> LOCATION: (596)
- 128 <223> OTHER INFORMATION: N stands for any nucleotide.
- 130 <400> SEQUENCE: 3
- 131 gatcaaactg gtggcgcaag ggcagcgcgt agcaaattta cccgatattt tggtctatgc 60
- 132 gcgcgtcggc aacggcatgg tagggcgacg ccgtggttta aaccaagcca aagcggaatg 120
- 133 gegettattt aagetaaaac accatettgg catteaggga tttttateeg ggetatteac 180
- 134 ttttgtcctg cgttccggtg ccagattatt gccgacatca ttactgaaaa acatctatca 240
- 135 aaccttttta agaaaataac atgatgaaat taaactgtat tttaaaaata tccggaattt 300
- 136 ccaccgcact tittctagcg ggttgttcct caaattcaag tgcgccgacg caatcctctg 360 137 agcaggegaa ttetgttacg getgtgaate ceaetgeggt gtacagtaag eeeegcaett 420
- 138 tggataactt caacgattat gtgaatttct taaaaggtaa agcagcggca gaaggcgttt 480 139 ctgccgacgt attgaatgca caaaataata ttaattatat tcaaaaatcc gtggatttgg 540
- W--> 140 acgatcaaca agcnggcaga attcgcaagc gtgatccaaa tgccccgccg atcatnaatt 600
 - 141 ccgaacggca cgaccaatta cttaaatcgt gtattaacca agaataaagt agacacggca 660
 - 142 gaagcacgtt attgggaaca attgccgcag cttgaaaatg cttcaaagaa attcagcgta 720
 - 143 ccgaaaaatt atctgttagc cttgtggggc atggagagta gctttggcta ttatcagggc 780
 - 144 aattacgatg tgttatccac cttagccact cttgcttttg acggacgccg tgaagcctta 840
 - 145 ttcagcaaag aattcatcgc cgccatgaaa atgctacagc gcgatc
 - 148 <210> SEQ ID NO: 4
 - 149 <211> LENGTH: 507
 - 150 <212> TYPE: DNA
 - 151 <213> ORGANISM: Actinobacillus actinomycetemcomitans
 - 153 <220> FEATURE:
 - 154 <221> NAME/KEY: misc_feature
 - 155 <222> LOCATION: (4)
 - 156 <223> OTHER INFORMATION: N stands for any nucleotide.
 - 158 <220> FEATURE:
 - 159 <221> NAME/KEY: misc_feature
 - 160 <222> LOCATION: (9)
 - 161 <223> OTHER INFORMATION: N stands for any nucleotide.
 - 163 <220> FEATURE:
 - 164 <221> NAME/KEY: misc_feature
 - 165 <222> LOCATION: (21)
 - 166 <223> OTHER INFORMATION: N stands for any nucleotide.
 - 168 <220> FEATURE:
 - 169 <221> NAME/KEY: misc_feature
 - 170 <222> LOCATION: (23)
 - 171 <223> OTHER INFORMATION: N stands for any nucleotide.
 - 173 <220> FEATURE:
 - 174 <221> NAME/KEY: misc_feature
 - 175 <222> LOCATION: (29)
 - 176 <223> OTHER INFORMATION: N stands for any nucleotide.
 - 178 <220> FEATURE:
 - 179 <221> NAME/KEY: misc_feature



RAW SEQUENCE LISTING DATE: 06/03/2002 PATENT APPLICATION: US/10/092,243A TIME: 13:55:12

- 180 <222> LOCATION: (32)
- 181 <223> OTHER INFORMATION: N stands for any nucleotide.
- 183 <220> FEATURE:
- 184 <221> NAME/KEY: misc_feature
- 185 <222> LOCATION: (35)..(36)
- 186 <223> OTHER INFORMATION: N stands for any nucleotide.
- 188 <220> FEATURE:
- 189 <221> NAME/KEY: misc_feature
- 190 <222> LOCATION: (39)
- '191 <223> OTHER INFORMATION: N stands for any nucleotide.
- 193 <220> FEATURE:
- 194 <221> NAME/KEY: misc_feature
- 195 <222> LOCATION: (42)
- 196 <223> OTHER INFORMATION: N stands for any nucleotide.
- 198 <220> FEATURE:
- 199 <221> NAME/KEY: misc_feature
- 200 <222> LOCATION: (45)
- 201 <223> OTHER INFORMATION: N stands for any nucleotide.
- 203 <220> FEATURE:
- 204 <221> NAME/KEY: misc_feature
- 205 <222> LOCATION: (49)
- 206 <223> OTHER INFORMATION: N stands for any nucleotide.
- 208 <220> FEATURE:
- 209 <221> NAME/KEY: misc_feature
- 210 <222> LOCATION: (52)
- 211 <223> OTHER INFORMATION: N stands for any nucleotide.
- 213 <220> FEATURE:
- 214 <221> NAME/KEY: misc_feature
- 215 <222> LOCATION: (58)
- 216 <223> OTHER INFORMATION: N stands for any nucleotide.
- 218 <220 FEATURE:
- 219 <221> NAME/KEY: misc_feature
- 220 <222> LOCATION: (61)..(62)
- 221 <223> OTHER INFORMATION: N stands for any nucleotide.
- 223 <220> FEATURE:
- 224 <221> NAME/KEY: misc_feature
- 225 <222> LOCATION: (65)
- 226 <223> OTHER INFORMATION: N stands for any nucleotide.
- 228 <220> FEATURE:
- 229 <221> NAME/KEY: misc_feature
- 230 <222> LOCATION: (69)
- 231 <223> OTHER INFORMATION: N stands for any nucleotide.
- 233 <220> FEATURE:
- 234 <221> NAME/KEY: misc_feature
- 235 <222> LOCATION: (73)
- 236 <223> OTHER INFORMATION: N stands for any nucleotide.
- 238 <220> FEATURE:
- 239 <221> NAME/KEY: misc_feature
- 240 <222> LOCATION: (97)



RAW SEQUENCE LISTINGPATENT APPLICATION: **US/10/092,243A**DATE: 06/03/2002

TIME: 13:55:12

Input Set : A:\00-505I.corrected.seqlist.txt
Output Set: N:\CRF3\06032002\J092243A.raw

241 <223> OTHER INFORMATION: N stands for any nucleotide. 243 <220> FEATURE: 244 <221> NAME/KEY: misc_feature 245 <222> LOCATION: (102) 246 <223> OTHER INFORMATION: N stands for any nucleotide. 248 <220> FEATURE: 249 <221> NAME/KEY: misc_feature 250 <222> LOCATION: (138) 251 <223> OTHER INFORMATION: N stands for any nucleotide. 253 <220> FEATURE: 254 <221> NAME/KEY: misc_feature 255 <222> LOCATION: (457) 256 <223> OTHER INFORMATION: N stands for any nucleotide. 258 <220> FEATURE: 259 <221> NAME/KEY: misc_feature 260 <222> LOCATION: (459) 261 <223> OTHER INFORMATION: N stands for any nucleotide. 263 <220> FEATURE: 264 <221> NAME/KEY: misc_feature 265 <222> LOCATION: (467) 266 <223> OTHER INFORMATION: N stands for any nucleotide. 268 <400> SEQUENCE: 4 W--> 269 ttgntaccnt agccgctgac nanaactanc angenntgna tnatntcgna tnattaanat 60 W--> 270 nngcnaggng cancagetta cetttgeega eggttenetg tntgaaageg ceattegeaa 120 W--> 271 agtgccggtg gaggcggnga aaattcactc acttggtgcg gaaggcaatg atgtgggatt 180 272 gaaagcccat catggcgggt ggataaagcg ttatttttta tgtcggcaga tgcctttcct 240 273 gcgttaaatg cgttattaga cgaaaatttt tcgtatcagg acacagcagt ttacqqcqag 300 274 aattttgtgg tttccgcgct gaatgaagat tccgtgtgtg tgggcgatat ttatcaaatc 360 275 ggctcctgcg tggtggaggt gtcgcagccg cgtaaacctt gtgagcgctt atcgaaaaat 420 W--> 276 accaataatc cgaacacgca acaaaccgtg tacgctneng ctggtenggc tggtatgtgc 480 277 cggtggtacc ccaaggggga aattcaa 280 <210> SEQ ID NO: 5 281 <211> LENGTH: 1087 282 <212> TYPE: DNA 283 <213> ORGANISM: Actinobacillus actinomycetemcomitans 285 <220> FEATURE: 286 <221> NAME/KEY: misc_feature 287 <222> LOCATION: (622) 288 <223> OTHER INFORMATION: N stands for any nucleotide. 290 <220> FEATURE: 291 <221> NAME/KEY: misc_feature 292 <222> LOCATION: (642) 293 <223> OTHER INFORMATION: N stands for any nucleotide. 295 <220> FEATURE: 296 <221> NAME/KEY: misc_feature 297 <222> LOCATION: (661) 298 <223> OTHER INFORMATION: N stands for any nucleotide.

300 <220> FEATURE:

301 <221> NAME/KEY: misc_feature

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/092,243A

DATE: 06/03/2002 TIME: 13:55:13

Input Set : A:\00-505I.corrected.seqlist.txt
Output Set: N:\CRF3\06032002\J092243A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 566,625,627,636,650,656,661,672,681,720,723

Seq#:3; N Pos. 554,596

Seq#:4; N Pos. 4,9,21,23,29,32,35,36,39,42,45,49,52,58,61,62,65,69,73,97

Seq#:4; N Pos. 102,138,457,459,467

Seq#:5; N Pos. 622,642,661,669,685,690,700

Seq#:6; N Pos. 609,614,651,665

Seq#:7; N Pos. 532,630,696,710,722,725

Seq#:8; N Pos. 538

Seq#:12; N Pos. 131,151,170,178,194,199,209

Seq#:18; Xaa Pos. 43,50,59,66,69





VERIFICATION SUMMARY

PATENT APPLICATION: US/10/092,243A

DATE: 06/03/2002 TIME: 13:55:13

```
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:93 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:540
L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:600
L:95 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:660
L:96 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:720
L:140~M:341~W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:540
L:269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:60
L:271 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:120
L:276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:420
L:331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:600
L:332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:660
L:378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:600
L:379 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:660
L:426~M:341~W:~(46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:480
L:428 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:600
L:429 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:660
L:430 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:720 L:453 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:480
L:548 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:120
L:549 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:180
L:706 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:32
L:709 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:48
L:712 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:64
```